

RPM DIESEL	Machine ID: SEA CLASS	Component ID: 668232830
2555 ST. RD. 84 FORT LAUDERDALE FL	Machine Year : NA	Component Make: NORTHERN LIGHTS
Phone:	Component Model: MP668M	Component Year: NA
Email:	Component Type : DIESEL ENGINE	MOTOR CHECK ANALYSIS
Fax:	Component Location: PORT GENERATOR	CLINIC 2000 N FLORIDA MANGO RD SUITE 104 WEST PALM BEACH FL 33409 561-684-7799
Component Description: Sump Capacity: 5 Quarts		

Sample ID	Date Taken	Hours on Component	Hours on Oil	Oil Weight	Oil Brand	Oil Type	Oil Changed	Date Analyzed	User Sample ID
50992	5/10/2024	1000	100	15W40	UNKNOWN	UNKNOWN	No	5/10/2024	

Comments: ALL ENGINE WEAR RATES NORMAL. SAMPLE APPEARS FREE OF EXTERNAL CONTAMINATION. ANALYSIS INDICATES PROPER PERFORMANCE OF THE LUBRICANT AND UNIT.

Sample ID	Contaminant Metals (ppm)			Multi-Source Metals (ppm)			Additives (ppm)						
	Wear Metals(ppm)	Tin	Lead	Sodium	Potassium	Titanium	Nickel	Manganese	Boron	Barium	Calcium	Phosphorus	Zinc
50992	<2	<2	>2	4	<2	<2	X	<2	<2	X	X	X	X
	Iron	Chromium	Aluminum	Copper	Silicon	Vanadium	Tin	Molybdenum	Titanium	Nickel	Manganese	Boron	Barium

Sample ID	Contaminants			Physical Properties				
	Water	Glycol	Nitration	TBN	Oxidation	V40C Limit	V100C Limit	Visc Mode
50992	Soot	Fuel				92 - 124	12.5 - 16.3	C

M = MEASURED

C = CALCULATED

NA = NOT AVAILABLE

X = NOT TESTED / NOT APPLICABLE

D = DETECTED

SEVERE

ABNORMAL

RPM DIESEL	Machine ID: SEA CLASS	Component ID: 668235839
2555 ST. RD. 84 FORT LAUDERDALE FL	Machine Year : NA	Component Make: NORTHERN LIGHTS
Phone:	Component Model: MP668H	Component Year: NA
Email:	Component Type : DIESEL ENGINE	MOTOR CHECK ANALYSIS
Fax:	Component Location: STARBOARD GENERATOR	CLINIC 2000 N FLORIDA MANGO RD SUITE 104 WEST PALM BEACH FL 33409 561-684-7799
Component Description: Sump Capacity: 5 Quarts		

Sample ID	Date Taken	Hours on Component	Hours on Oil	Oil Weight	Oil Brand	Oil Type	Oil Changed	Date Analyzed	User Sample ID
50993	5/10/2024	1000	100	15W40	UNKNOWN	UNKNOWN	No	5/10/2024	
Comments: LEAD LEVEL (BEARINGS) HIGH. SAMPLE APPEARS FREE OF EXTERNAL CONTAMINATION.									

Sample ID	Wear Metals(ppm)			Contaminant Metals (ppm)			Multi-Source Metals (ppm)			Additives (ppm)				
	Iron	Chromium	Aluminum	Copper	Tin	Lead	Silicon	Potassium	Titanium	Nickel	Manganese	Boron	Phosphorus	Zinc
50993	<2	<2	<2	4	28	<2	X	2	<2	X	7	X	X	X

Sample ID	Contaminants			Physical Properties						
	Water	Glycol	TBN	Oxidation	V40C	V100C	VIndex	V40C Limit	V100C Limit	Visc Mode
50993	Soot	Fuel	9.7	3.5	109	14.4	135	92 - 124	12.5 - 16.3	C

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SEVERE

ABNORMAL

RPM DIESEL	Machine ID: SEA CLASS Machine Year : NA	Component ID: 535105760 Component Make: MTU
2555 ST. RD. 84 FORT LAUDERDALE FL	Component Model: 12V2000 CR	Component Year: NA
Phone:	Component Type : DIESEL ENGINE	MOTOR CHECK ANALYSIS CLINIC 2000 N FLORIDA MANGO RD SUITE 104 WEST PALM BEACH FL 33409 561-684-7799
Email:	Component Location: PORT MAIN	
Fax:	Component Description: Sump Capacity: 5 Quarts	

Sample ID	Date Taken	Hours on Component	Hours on Oil	Oil Weight	Oil Brand	Oil Type	Oil Changed	Date Analyzed	User Sample ID
50994	5/10/2024	1000	100	15W40	UNKNOWN	UNKNOWN	No	5/10/2024	
Comments ALL ENGINE WEAR RATES NORMAL. SODIUM LEVEL HIGHER THAN TYPICAL, CHECK FOR SOURCE OF COOLANT AND/OR SALT WATER LEAK.									

Sample ID	Contaminant Metals (ppm)			Multi-Source Metals (ppm)			Additives (ppm)						
	Wear Metals(ppm)	Tin	Lead	Sodium	Potassium	Titanium	Nickel	Manganese	Boron	Barium	Calcium	Phosphorus	Zinc
50994	Iron	Chromium	Aluminum	Copper	Silicon	Vanadium	Tin	Molybdenum	Titanium	Nickel	Manganese	Boron	
50994	3	<2	<2	9	<2	<2	X	3	<2	X	2	X	X

Sample ID	Contaminants			Physical Properties						
	Contaminants	Nitration	TBN	Oxidation	V40C	V100C	VIndex	V100C Limit	V40C Limit	Visc Mode
50994	Fuel	Glycol	Water	Soot	Water	TBN	Nitration			

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ABNORMAL

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SEVERE

M = MEASURED

RPM DIESEL	Machine ID: SEA CLASS	Component ID: 535105759
2555 ST. RD. 84 FORT LAUDERDALE FL	Machine Year : NA	Component Make: MTU
Phone:	Component Model: 12V/2000 CR	Component Year: NA
Email:	Component Type : DIESEL ENGINE	Component Location: STARBOARD MAIN
Fax:	Component Description:	Sump Capacity: 5 Quarts

Sample ID	Date Taken	Hours on Component	Hours on Oil	Oil Weight	Oil Brand	Oil Type	Oil Changed	Date Analyzed	User Sample ID
50995	5/10/2024	1000	100	15W40	UNKNOWN	UNKNOWN	No	5/10/2024	

Comments: ALL ENGINE WEAR RATES NORMAL. SAMPLE APPEARS FREE OF EXTERNAL CONTAMINATION. ANALYSIS INDICATES PROPER PERFORMANCE OF THE LUBRICANT AND UNIT.

Sample ID	Contaminant Metals (ppm)			Multi-Source Metals (ppm)			Additives (ppm)			
	Wear Metals(ppm)	Tin	Lead	Sodium	Potassium	Titanium	Manganese	Boron	Phosphorus	Zinc
50995	Iron	Chromium	Aluminum	Copper	Vanadium	Silicon	Nickel	Molybdenum	Titanium	
50995	<2	<2	<2	<2	<2	X	3	5	<2	X

Sample ID	Contaminants			Physical Properties		
	Oxidation	TBN	Nitration	V40C Limit	V100C Limit	Visc Mode
50995	Glycol	Water	Soot	VIndex	V100C Limit	
50995	Fuel			V40C Limit	V100C	

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RPM DIESEL	Machine ID: SEA CLASS	Component ID: 50023642
2555 ST. RD. 84 FORT LAUDERDALE FL	Machine Year : NA	Component Make: ZF
Phone:	Component Model: GENERAL	Component Year: NA
Email:	Component Type : GEARBOX	MOTOR CHECK ANALYSIS
Fax:	Component Location: PORT	CLINIC 2000 N FLORIDA MANGO RD SUITE 104 WEST PALM BEACH FL 33409 561-684-7799
Sump Capacity: 5 Quarts		

Sample ID	Date Taken	Hours on Component	Hours on Oil	Oil Weight	Oil Brand	Oil Type	Oil Changed	Date Analyzed	User Sample ID
50996	5/10/2024	1000	100	SAE 30	UNKNOWN	UNKNOWN	No	5/10/2024	

Comments: GEAR UNIT WEAR RATES NORMAL. SAMPLE APPEARS FREE OF EXTERNAL CONTAMINATION. ANALYSIS INDICATES PROPER PERFORMANCE OF THE LUBRICANT AND UNIT.

Sample ID	Wear Metals(ppm)		Contaminant Metals (ppm)		Multi-Source Metals (ppm)		Additives (ppm)								
	Iron	Chromium	Aluminum	Copper	Tin	Lead	Sodium	Potassium	Boron	Manganese	Nickel	Molybdenum	Titanium	Phosphorus	Zinc
50996	<2	<2	<2	67	<2	X	5	3	<2	X	8	X	X	X	X

Contaminants	Physical Properties			
	Nitration	TBN	V40C	V100C
Water	Glycol		VIndex	V100C Limit
Soot				Visc Mode
Fuel				V40C Limit
Sample ID				V100C Limit

Sample ID: 50996

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SEVERE

ABNORMAL

RPM DIESEL	Machine ID: SEA CLASS	Component ID: 50023 642
2555 ST. RD. 84 FORT LAUDERDALE FL	Machine Year : NA	Component Make: ZF
Phone:	Component Model: GENERAL	Component Year: NA
Email:	Component Type : GEARBOX	MOTOR CHECK ANALYSIS
Fax:	Component Location: STARBOARD	CLINIC 2000 N FLORIDA MANGO RD SUITE 104 WEST PALM BEACH FL 33409 561-684-7799
Sump Capacity: 5 Quarts		

Sample ID	Date Taken	Hours on Component	Hours on Oil	Oil Weight	Oil Brand	Oil Type	Oil Changed	Date Analyzed	User Sample ID
50997	5/10/2024	1000	100	SAE 30	UNKNOWN	UNKNOWN	No	5/10/2024	
Comments: GEAR UNIT WEAR RATES NORMAL. SAMPLE APPEARS FREE OF EXTERNAL CONTAMINATION. ANALYSIS INDICATES PROPER PERFORMANCE OF THE LUBRICANT AND UNIT.									

Sample ID	Wear Metals(ppm)		Contaminant Metals (ppm)		Multi-Source Metals (ppm)		Additives (ppm)										
	Iron	Chromium	Aluminum	Copper	Tin	Lead	Sodium	Potassium	Manganese	Boron	Nickel	Molybdenum	Titanium	Phosphorus	Barium	Calcium	Zinc
50997	<2	<2	<2	5	81	<2	X	5	3	<2	X	9	X	X	X	X	X

Sample ID	Contaminants		Physical Properties		
	Contaminant	Test Result	Test	Value	Unit
50997	Glycol	Nitration	V40C	V100C	VIndex
50997	Water	TBN	V40C	V40C Limit	V100C Limit
50997	Soot	Oxidation	V100C	V100C Limit	Visc Mode
50997	Fuel			86 - 116	9.3 - 12.5

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